

11. (New) The process as claimed in claim 10, wherein the cyanamide/hydrazine molar ratio used is between about 0.8 and about 0.99.

12. (New) The process as claimed in claim 11, wherein the cyanamide/hydrazine molar ratio is between about 0.85 to about 0.95.

13. (New) The process as claimed in claim 10, wherein the pH of the reaction medium is between about 6.5 and about 8.

14. (New) The process as claimed in claim 13, wherein the pH of the reaction medium is between about 7 and about 7.3.

15. (New) The process as claimed in claim 10, wherein the temperature of the reaction medium is between about 35°C and about 70°C.

16. (New) The process as claimed in claim 15, wherein the temperature of the reaction medium is between about 40°C and about 50°C.

17. (New) The process as claimed in claim 10, wherein the pH of the hydrazine hydrate solution is adjusted using CO₂, and the aqueous cyanamide solution is then introduced.

18. (New) The process as claimed in claim 10, wherein the hydrazine hydrate solution and CO₂ are simultaneously added to the cyanamide solution.

19. (New) The process as claimed in claim 10, wherein the cyanamide solution or of the hydrazine hydrate solution is kept being added to the reaction medium for between about 1 and about 3 hours.

20. (New) A process for manufacturing aminoguanidine bicarbonate, comprising combining an aqueous solution of cyanamide and an aqueous solution of hydrazine hydrate to form a reaction medium in the presence of CO₂, wherein the molar ratio of the cyanamide to the hydrazine used in the process is between about 0.8 and about 0.99, wherein the pH of the reaction medium is between about 6.5 and about 8, and wherein the temperature of the reaction medium is between about 35°C and about 70°C.

21. (New) A virtually spherical aggregate of amino guanidine bicarbonate crystals with a mean diameter of between about 80 and about 500 μm.

22. (New) The virtually spherical aggregate of amino guanidine bicarbonate crystals of claim 21, wherein the mean diameter is between about 100 and about 250 μm.